identified by the SID. The received request packet includes the SID indication associated with the service available in the sender in the sender's address field, such as the ScanA field. In response to receiving the discovery request packet, the Bluetooth LE wireless device **110** functioning as an advertiser, may filter the received SID indication in the SCAN_REQ PDU to determine whether there is any match of the received SID indication with one or more service identities of required services. The Bluetooth LE wireless device **110**, functioning as an advertiser, transmits a wireless discovery response packet, such as a Bluetooth LE SCAN_RSP PDU, in response to the received wireless discovery request packet, including the SID indication on which the match occurred, if the filtering determines that there is a match.

[0347] The steps of the flow diagram represent computer code instructions stored in the RAM and/or ROM memory, which when executed by the central processing units (CPU) CPU1 and/or CPU2, carry out the functions of the example embodiments of the invention. The steps may be carried out in another order than shown and individual steps may be combined or separated into component steps. The flow diagram has the following steps:

[0348] Step **402** inserting, by an apparatus, an indication associated with a required service to an apparatus address field of a wireless advertisement packet (for example an ADV_IND_PDU advertisement packet);

[0349] Step **404**: transmitting, by the apparatus, the wireless advertisement packet including the inserted indication associated with the required service;

[0350] Step **406**: receiving, by the apparatus, one or more wireless discovery request packets (for example, a SCAN_REQ PDU discovery request packet) in response to the transmitted wireless advertisement packet;

[0351] Step **408**: determining, by the apparatus, whether any of the received wireless discovery request packets matches with one or more required services by filtering sender address field indication of each of the received one or more discovery wireless request packets with service identities corresponding with the one or more required services; and

[0352] Step **410**: transmitting, by the apparatus, a wireless discovery response packet (for example, a SCAN RESP PDU discovery response packet) in response to the received wireless discovery request packet including an indication associated with the service on which the determination resulted a match.

[0353] FIG. **7**C is an example flow diagram **450** of operational steps of the Bluetooth LE scanning device **100** operating as a NAN publisher. The device has previously buffered the SIDs of the services it has available. The Bluetooth LE wireless device **100** filters and analyzes the AdvA field of the received ADV_IND or ADV_SCAN_IND_PDU and determines whether there is any match with the buffered SIDs, for NAN service discovery. If the filtering determines that there is a match, the Bluetooth LE wireless device **100** prepares a wireless discovery response packet, SCAN_REQ PDU, to be transmitted including the indication associated with the service on which the match occurred, in accordance with at least one embodiment of the present invention. The steps of the flow diagram represent computer code instructions stored in the RAM and/or ROM memory, which when executed by the central processing units (CPU) CPU1 and/or CPU2, carry out the functions of the example embodiments of the invention. The steps may be carried out in another order than shown and individual steps may be combined or separated into component steps. The flow diagram has the following steps:

[0354] Step **452**: maintaining, by an apparatus, one or more service identities of services the apparatus has available;

[0355] Step **454**: receiving, by the apparatus, a wireless advertisement packet (for example, a ADV_IND_PDU packet) including an indication in a sender address field of the wireless advertisement packet associated with a required service by a source apparatus of the wireless advertisement packet;

[0356] Step **456**: determining, by the apparatus, whether the required service advertised in the received wireless advertisement packet matches with any of the one or more available services by filtering the sender address field indication of the received wireless advertisement packet with the maintained one or more service identities;

[0357] Step **458**: transmitting, by the apparatus, a wireless discovery request packet (for example, a SCAN_REQ PDU packet, including an indication associated with the service on which the determination resulted a match; and

[0358] Step **460**: waiting, by the apparatus, for a wireless response packet (for example, a SCAN_RSP PDU packet) including the indication associated with the advertised service on which the match occurred.

[0359] The wireless advertisement packet may comprise either a Bluetooth Low Energy ADV_IND_PDU packet or a Bluetooth Low Energy ADV_SCAN_IND_PDU packet.

[0360] The sender address field may be a non-resolvable private address format in an AdvA field of either the Bluetooth Low Energy ADV_IND_PDU packet or the Bluetooth Low Energy ADV_SCAN_IND_PDU packet.

[0361] The apparatus may be functioning as a subscriber in a Neighbor Awareness Networking (NAN) network.

[0362] After filtering the SID in the address field with the stored SID values, if there is a match either in the publisher or in the subscriber, the apparatus may consider the match as an indication of need for further action, for example, activation of Wi-Fi NAN for publishing or subscribing purposes.

[0363] Operational steps of the Bluetooth LE advertising device **110** operating as a NAN subscriber, comprise:

[0364] inserting, by an apparatus, an indication associated with a required service to an apparatus address field of a wireless advertisement packet; and

[0365] transmitting, by the apparatus, the wireless advertisement packet including the inserted indication associated with the required service.

[0366] Operational steps of the Bluetooth LE advertising device **110** operating as a NAN subscriber, comprise:

[0367] inserting, by an apparatus, an indication associated with a required service to an apparatus address field of a wireless advertisement packet;

[0368] transmitting, by the apparatus, the wireless advertisement packet including the inserted indication associated with the required service;

[0369] receiving, by the apparatus, one or more wireless discovery request packets in response to the transmitted wireless advertisement packet;

[0370] determining, by the apparatus, whether any of the received wireless discovery request packets matches with one or more required services by filtering sender address field indication of each of the received one or more wireless discovery request packets with service identities corresponding with the one or more required services; and